Amendments to the Specification:

Please replace the paragraph at page 5, lines 4-5, with the following amended paragraph:

Table 4 depicts different percentages of detergent ~~Tween~~ Tween®20 in clove oil emulsion preparations. The detergent percentage was varied as 2, 2.5, 3.5 and 4.0 %.

Please replace the paragraph at page 5, lines 8-11, with the following amended paragraph:

Table 6 and **Table 7** depict clove oil emulsion preparations with varying percentages of groundnut oil (saturated oil). The different percentages of groundnut oil used were 50, 20, 10, 4, 2, 1 (Table 6) and 0.75, 0.5, 0.2 and 0.1 (table 7) with a sonication time of 2 minutes and 2% of ~~Tween~~ Tween®20.

Please replace the paragraph at page 5, lines 14-17, with the following amended paragraph:

Table 9 depicts preparation of clove oil emulsion with 2% ~~Tween~~ Tween®20 and 0.1% carrier Saffola oil at pH 9.0 at different concentrations of an electrolyte NaCl solution. The concentrations of NaCl used were 0.1ppm, 0.05 ppm, 0.02 ppm and 0.01 ppm.

Please replace the paragraph at page 7, lines 16-17, with the following amended paragraph:

In another embodiment of the invention, the composition comprises a clove oil emulsion comprising ~~Tween~~ Tween®20 and Saffola oil with Na_2HPO_4 at pH 9.0.

Please replace the paragraph at page 10, lines 8-15, with the following amended paragraph:

Any suitable emulsifier may be used, for example the ~~Tween~~ Tween®, ~~Myrj~~ Myrj™ and ~~Bryj~~ Bryj™ surfactants, poloxamers and their derivatives, polyoxyethylene 50 stearate, polyoxyl 35 castor oil, polyoxyl 10 oleyl ether, polyoxyl 20 cetostearyl ether, polyoxyl 40 stearate, polysorbate 20, polysorbate 40, polysorbate 60, polysorbate 80, propylene glycol diacetate, propylene glycol monostearate, sodium lauryl sulfate, sodium stearate, sorbitan mono-laurate, sorbitan mono-oleate, sorbitan mono-palmitate, sorbitan monostearate, stearic acid, and emulsifying wax. The ~~Tween~~ Tween® surfactants, in particular ~~Tween~~ Tween®20, are preferred.

Please replace the paragraph at page 10, lines 16-20, with the following amended paragraph:

The emulsifier may be present in any concentration sufficient to allow formation of a stable oil-in-water emulsion from the essential oil and optional carrier oil. For example, the amount of emulsifier may be from .5 to 10%, preferably from 2 to 4% (w/w) of essential oil in the composition. Preferred is a composition comprising 2% ~~Tween~~ Tween®20.

Please replace the paragraph at page 14 lines 23-26 with the following amended paragraph:

To prepare the emulsion, clove oil I.P. 5ml setting was mixed with 2% ~~Tween~~ Tween®20 (100µl) and 0.1% Saffola oil (5µl), sonicated for 2 mins between 2 and 3 of the sonicator (Cole-Parmer, Torbeo, Ultrasonic Processor, 36800 Series) and diluted with sterile distilled water to different dilutions as shown in Table 13.

Please replace the paragraph at page 14, line 27 - page 14, line 4, with the following amended paragraph:

For better micelle preparation and subsequently stable emulsion it was believed that at pH 9.0 of clove oil emulsion the molecule of eugenol will be in ionized form. With very low concentration of electrolyte NaCl or Na_2HPO_4 solution along with 2% ~~Tween~~ Tween®20 and carrier oil 0.1% Saffola oil forms better micelle. In these emulsions, the mixture of clove oil, ~~Tween~~ Tween®20 and Saffola oil was first sonicated as above, diluted 1:10 by sterile distilled water, and the pH of the milky emulsion was adjusted to 9.0 by KOH solution. The concentrations of NaCl used were 0.1ppm, 0.05 ppm, 0.02 ppm and 0.01 ppm

Please replace the paragraph at page 19 lines 5-8 with the following amended paragraph:

Five emulsions containing different percentages of ~~Tween~~ Tween®20 (E1 to E5; see Table 4) were made and tested at different dilutions for the ability to disinfect 1 ml, 100 ml, or 1 L of drinking water (D.W.) inoculated with *E. coli* (see General Methodologies, above).

Please replace the paragraph at page 20, lines 2-4, with the following amended paragraph:

The dilutions of emulsion E2 1:10, 1:100 and 1:500 with 2.5% ~~Tween~~ Tween® 20 showed positive results in 1 ml while in 1L reaction volume at the doses of 100 µl, 500 µl and 1 ml gave negative results after contact period of 3 hrs and 6 hrs.

Please replace Table 5 at page 20 with the following amended table:

~~Table5~~ Table 5: Different sonication times in Clove Emulsion Preparation

Emulsion Constituents	Emulsion E6	E7	E8	E9	E10
~~Tween~~ Tween® 20 Percentage	2	2.5	3.0	3.5	4.0
Sonication Time	2	5	7	10	15

Please replace the paragraph at page 21, lines 1-10, with the following amended paragraph:

Example 8

Emulsions E11-E15 (Table 6) with 2% ~~Tween~~ Tween® 20 and different percentages of groundnut oil were tested for the disinfection activity in 100ml. Disinfection activity of E12 was observed, but was non-reproducible, so "-" activity is indicated in Table 13 for this emulsion.

Table 6: Clove oil emulsion with varying concentrations of groundnut oil (saturated oil)

Emulsion Constituents	Stock Emulsion E11	E12	E13	E14	E15
Clove Oil neat	5ml	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl	100µl
Groundnut Oil	250µl 5%	200µl 4%	150µl 3%	100µl 2%	50µl 1%

Please replace the paragraph at page 22, lines 1-5, with the following amended paragraph:

Table 7: Clove oil emulsion with varying concentrations of groundnut oil (saturated oil)

Emulsion Constituents	Stock Emulsion E16	E17	E18	E19	E20
Clove Oil neat	5ml	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl	100µl
Groundnut Oil	50µl 1%	33.5µl 0.75%	25µl 0.5%	12.5µl 0.25%	5µl 0.1%

Please replace the paragraph at page 22, lines 10-17, with the following amended paragraph:

Clove oil emulsion E20 (see Table 7) with 2% ~~Tween~~ Tween® 20, sonication time of 2 minutes, and 0.1% groundnut oil were diluted 1:20 and tested in 100ml water with 10^4 cells of *E. coli* with an overnight contact time. These emulsions showed positive results by 2X LB method and the Membrane Filter Technique. As described above, the filter discs with the filtered samples were placed on MEC agar plates at 44.5^0C overnight and the yellow colonies counted. In 100ml reaction volume, E20 at the doses of 50µl, 100µl, 200µl and 500µl gave positive results (Table 13).

Please replace Table 8 at page 23 with the following amended table:

Table 8: Clove oil emulsion with Saffola oil (unsaturated corn oil)

Emulsion Constituents	Stock Emulsion E21
Clove Oil neat	5ml
~~Tween~~ Tween® 20 (2%)	100µl
Saffola oil	5µl ,0.1%

Please replace the paragraph at page 23, lines 13-16, with the following amended paragraph:

Example 11

Clove oil emulsions E22-E26 were prepared using an electrolyte NaCl solution, along with 2% ~~Tween~~ Tween® 20 and 0.1% carrier Saffola oil at pH 9.0. Concentrations of NaCl used were 0.1ppm, 0.05 ppm, 0.02 ppm and 0.01 ppm (Table 9). Disinfection activities of emulsions E-22-E-26 are shown in Table 13.

Please replace Table 9 at page 24 with the following amended table:

Table 9: Preparation of Clove oil emulsion using NaCl solution

Emulsion Constituents	Stock Emulsion			
	E22	E23	E24	E25
Clove Oil neat	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl
Saffola oil 0.1%	5µl	5µl	5µl	5µl
NaCl sol'n (10ppm stock)	0.1ppm	0.05 ppm	0.02 ppm	0.01 ppm

Pleas replace Table 10 at page 25 with the following amended table::

Table10: Preparation of Clove oil emulsion using Na_2HPO_4 solution

Emulsion Constituents	Stock Emulsion			
	E26	E27	E28	E29
Clove Oil neat	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl
Saffola oil 0.1%	5µl	5µl	5µl	5µl
Na_2HPO_4 sol'n	0.1ppm	0.05 ppm	0.02 ppm	0.01 ppm

Please replace Table 11 at page 26 with the following amended table:

Table 11: Preparation of Clove oil emulsion using NaCl solution dilution by pH 9.0 water

Emulsion Constituents	Stock Emulsion			
	E30	**E31**	**E32**	**E33**
Clove Oil neat	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl
Saffola oil 0.1%	5µl	5µl	5µl	5µl
NaCl sol'n (10ppm stock)	0.1ppm	0.05 ppm	0.02 ppm	0.01 ppm

Please replace the paragraph at page 26, lines 12-14, with the following amended paragraph:

It was observed that these emulsions with 2% ~~Tween~~ Tween® 20, 0.1% Saffola oil, 2 minutes sonication time at each step and 0.1ppm of Na_2HPO_4 at pH 9.0 performed well in disinfection of drinking water, as shown in Table 14.

Please replace Table 12 at page 27 with the following amended table:

Table 12: Preparation of Clove oil emulsion using Na_2HPO_4 solution, dilution by pH 9.0 water

Emulsion Constituents	Stock Emulsion			
	E34	**E35**	**E36**	**E37**
Clove Oil Neat	5ml	5ml	5ml	5ml
~~Tween~~ Tween® 20 (2%)	100µl	100µl	100µl	100µl
Saffola oil 0.1%	5µl	5µl	5µl	5µl
Na_2HPO_4 sol'n	0.1 ppm	0.05 ppm	0.02 ppm	0.01 ppm